



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

SEP 22 2009

Colonel Robert D. Peterson
District Engineer
U.S. Army Corps of Engineers, Huntington District
502 Eighth Street
Huntington, West Virginia 25701-2070

Re: PN 2006-2196-GUY; Highland Mining Company;
George's Creek Surface Mine

Dear Colonel Peterson:

The U.S. Environmental Protection Agency (EPA) provided comments on August 28, 2009 in response to the Public Notice issued for Highland Mining Company's George's Creek Surface Mine. The proposed project involves the construction of one permanent valley fill and one temporary in-stream drainage pond, impacting a total of 4,220 linear feet of streams. The project is proposed in an unnamed tributary of George's Creek which flows into Dingess Run which is a tributary to the Guyandotte River. As stated in EPA's letter dated August 28, 2009, EPA believes the project as proposed may not comply with the Section 404(b)(1) Guidelines, that the project may adversely affect water quality, resulting in an impairment of the local and downstream aquatic life use, and that the project's direct and cumulative impacts may be persistent and permanent and cause or contribute to significant degradation of the aquatic ecosystem. These comments are incorporated herein by reference.

EPA continues to be concerned that this project may not satisfy the Clean Water Act Section 404(b)(1) Guidelines, 40 C.F.R. Part 230, that form the substantive environmental criteria upon which permit decisions are based. EPA believes that the project, as proposed, will result in substantial and unacceptable impacts to aquatic resources covered in Part IV of the 1992 Clean Water Act Section 404(q) Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army.

To address our concerns EPA offers the following recommendations to the Corps and the applicant.

- An alternatives analysis should be conducted that evaluates not only geographic alternatives, but design and technology alternatives which avoid impacts to aquatic resources to the maximum extent practicable and should clearly demonstrate and explain why less damaging alternatives are not practicable.



- Monitoring conditions should be incorporated into the permit requiring the applicant to conduct appropriate instream monitoring, consideration of the effluent discharge below the valley fills, and monitoring of the effluent. Should the monitoring show an excursion from the narrative water quality standards and/or significant degradation as defined at 40 C.F.R. § 230.10(c) at points downstream from the valley fills mining must stop until the excursions can be remediated. This is to ensure that discharges associated with the project do not cause or contribute to significant degradation and/or excursions from applicable water quality standards, and thus, are not inconsistent with the requirements in the Section 404(b)(1) Guidelines.
- An analysis should be conducted to determine whether the project has the potential to cause or contribute to significant degradation and/or excursions from water quality standards. The analysis should consider effects on water chemistry, including metals, pH, alkalinity, total suspended solids, total dissolved solids, and conductivity, and on the naturally occurring aquatic community. The analysis also should consider baseline pre-mining and post-mining water quality and biological data and post-mining data from streams downstream from other surface coal mining operations within the 12-digit hydrologic unit code of the proposed project in order to predict likely post-mining water quality changes due to the proposed permit. Existing water quality in receiving waters for this project is already severely degraded. Dingess Run, which would receive the drainage from both George's Creek and Reylas mines, is already a severely impaired stream with a WVSCI score of 33.6. By comparison, the West Virginia Department of Environmental Protection considers streams with WVSCI scores of greater than 68 as supporting the designated aquatic life use. The analysis should consider the likely impact to downstream waters from discharges to the unnamed tributary of George's Creek where the fill is to be placed, which has a WVSCI score of 93.2 and the proposed location of the sediment pond, which has a WVSCI score of 89.7. The analysis should, at a minimum, utilize the bioassessment tools utilized by West Virginia to identify impaired waters and candidate stressors pursuant to Section 303(d) of the Clean Water Act, including index periods, field and laboratory methods, and numbers of samples required to assess aquatic life uses. The analysis must consider whether any waters within the watershed are identified as impaired or threatened on the State's Section 303(d) list and whether any total maximum daily loads have been established. All biological and chemical data collected at the project site and the adjacent mine site should be submitted to the Corps and EPA for review.
- The Corps should conduct a thorough cumulative effects analysis of mining impacts within the sub-basin as part of the decision-making process for this particular permit application. This project in combination with other identified potential future projects (including the proposed nearby Reylas surface mine) represent a potential for the subwatershed to become 33% impacted by mining activities. The cumulative effects analysis should include at a minimum the cumulative effects of all reasonably foreseeable activities on water quality, loss of stream function and habitat and the effects of the hydrologic modifications to the

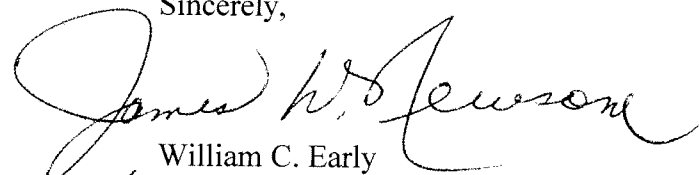
watershed. It should also address the impact of deforestation on water quality, water quantity, and overall ecological conditions within the watershed. To the extent the Corps relies upon the State's Section 401 Certification or a Cumulative Hydrologic Impact Analysis (CHIA), the Corps' analysis should identify the specific language (including not only the conclusions but the underlying analysis) within the Section 401 Certification and/or CHIA that is relevant to the Corps' cumulative impact analysis.

- Any approved mitigation should ensure the replacement of the lost functions and services of the impacted streams and incorporate performance standards that include restoration of observable or measurable physical, chemical, and biological criteria. Also, included must be a monitoring plan that will be used to determine if success is being achieved within a reasonable timeframe to determine if the compensatory mitigation project meets its objectives. To ensure full compensation for lost functions, EPA encourages the mitigation project be in place prior to the discharge of fill material.

EPA believes there are opportunities to address the concerns EPA has raised and looks forward to working with the Corps and the applicant to explore the recommendations provided by EPA, and other opportunities the Corps and the applicant wish to introduce and discuss.

If you have any questions or concerns please feel free to contact me or Mr. John R. Pomponio, Division Director, Environmental Assessment & Innovation Division, at 215-814-2702.

Sincerely,



William C. Early
Acting Regional Administrator

